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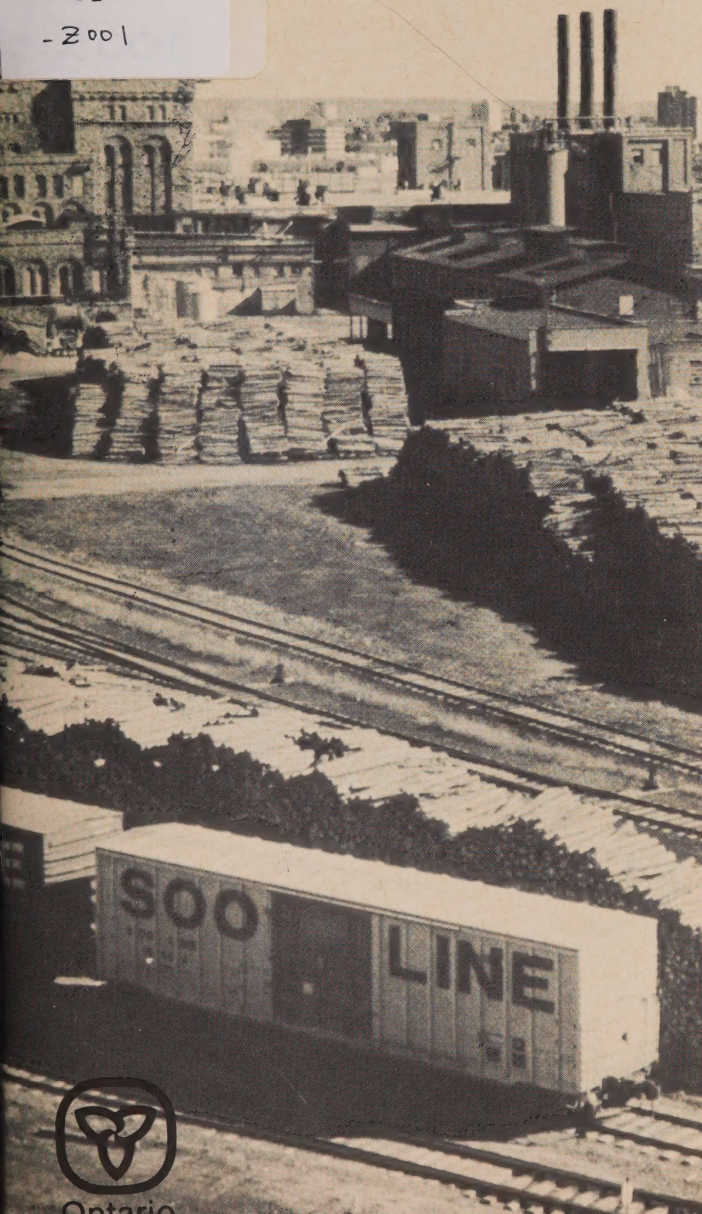


Sault Industry

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Ontario

Discover the Working Past

Sault Ste. Marie is one of the industrial giants of Canada — a leading center of manufacturing, shipping and hydro power. This development began almost a century ago in a small area which now lies beneath the span of the International Bridge. The area includes historic mills, powerhouses, engineering works and a canal and lock system.



A place of living history and one of Canada's national historic parks, it retains its significance in the economic fabric of the country.

Discover the industrial heritage of the Sault through this booklet which provides a self-guided walking tour of St. Mary's Island and the adjacent mainland.



From Outpost to Empire

The industrial development of Sault Ste. Marie began in the 1890's with the concurrence of two events – the construction of a shipping canal and the arrival of Francis Hector Clergue, an American entrepreneur. Both the building of the canal and Clergue's vision of an industrial empire were founded on the existence of one natural phenomenon – the rapids of the St. Mary's River. The canal overcame the obstacle of the rapids to shipping between Lakes Superior and Huron. To Clergue, however, the rapids had a different significance. They were a promise of boundless hydro power.

Discovery and the Fur Trade

Throughout the Sault's history, these rapids played a prominent role. In 1622, Etienne Brule, a French explorer and the first whiteman to reach Lake Superior, found Ojibway tribes harvesting fish from the rushing waters. The natives called the place "Patawing", "turbulent and bounding waters". Brule named it "Sault", meaning "rapids", claimed the region for France, and established the fur trade. For the next two hundred years the trade in furs and fishing were the only commercial activities at the Sault. A trading post was built. In 1797, a small shipping canal for canoe and batteau was constructed to overcome the rapids. At this time, the post included a store and sawmill.

Progress and the Railway

The fur trade dwindled and by 1850 disappeared. The Sault struggled through the nineteenth century as a frontier community of about 2,000 people until 1887 when it was incorporated as a town. In the same year, with the construction of the CPR line from the east and the International Railway Bridge across the St. Mary's River from the United States, important land transportation links were established.

Land values rose and new settlers flocked to the town. It was an opportune time for a group of local businessmen to attempt to develop the waterpower of the rapids. The boom was short-lived. The project fell aground, although the construction of a power canal had been undertaken.

Canal Building

While the need to develop the rapids for power was pressing, the need to bypass them for shipping became crucial. Because a Canadian arms ship en route to the Red River Rebellion of 1871 had been refused passage through the American locks, plans were precipitated for a canal and lock at the Sault. This project, initiated in 1889, and spanning six years, was one of unprecedented magnitude. As

– The Growth of Industry

the locks were nearing completion, the stage for industrial development was set. As well as being a shipping center, the Sault was on the major railway networks of Canada and Michigan; its surrounding region was rich in timber and minerals; it was a potential hydro power site. The catalyst appeared in March, 1894.

Clergue at the Rapids

Francis Hector Clergue arrived at Sault Ste. Marie with a group of Philadelphia financiers on a cross-Canada search for waterpower sites. He was immediately convinced that the potential power within the rapids could drive a great industrial machine. A man of vision and influence, Clergue set out to make that dream a reality. He acquired power rights and bought the existing power installations. By 1895, he erected a new stone powerhouse in the style of a medieval battlement.

Empire Building

After assessing the regions's magnificent timber resources, Clergue constructed a pulp mill to use the available power. Operations began at the mill in 1896. Within the next few years, he added a sulphite mill to dry pulp and, with the acquisition of the Helen mine at Michipicoten, an ironworks and foundry to produce machinery. He then built a steel plant and rail mill. To transport raw materials and finished products to and from the mills, he formed the Algoma Central Railway and bought a fleet of steamships.

By the turn of the century, a fortress-like complex of imposing stone structures had appeared. It was known as the Lake Superior Consolidated Works. By 1902, when the first steel was blown, the holdings of the corporation included powerhouses, pulp and paper mills, an ironworks, a brick plant, steel mills, mines, a railway, a steamship line, streetcar lines, ferryboats, a telegraph company, as well as possessing power rights on both sides of the St. Mary's River and timber rights north of the Sault.

Clergue had engineered and now controlled the greatest self-sufficient industrial empire Canada had ever seen. New settlers and immigrant workers quadrupled the town's population to 8,000 and formed Steelton, a separate community near the mills. Northern Ontario was the "New Ontario" and Clergue hailed as the "Napoleon of Canadian Industry."

The Collapse

The great machine began to strain and by the close of 1902, it ground to a sudden halt. Markets had declined while spending and production had increased. The company was on the verge of collapse. When 3,500 unpaid mill employees

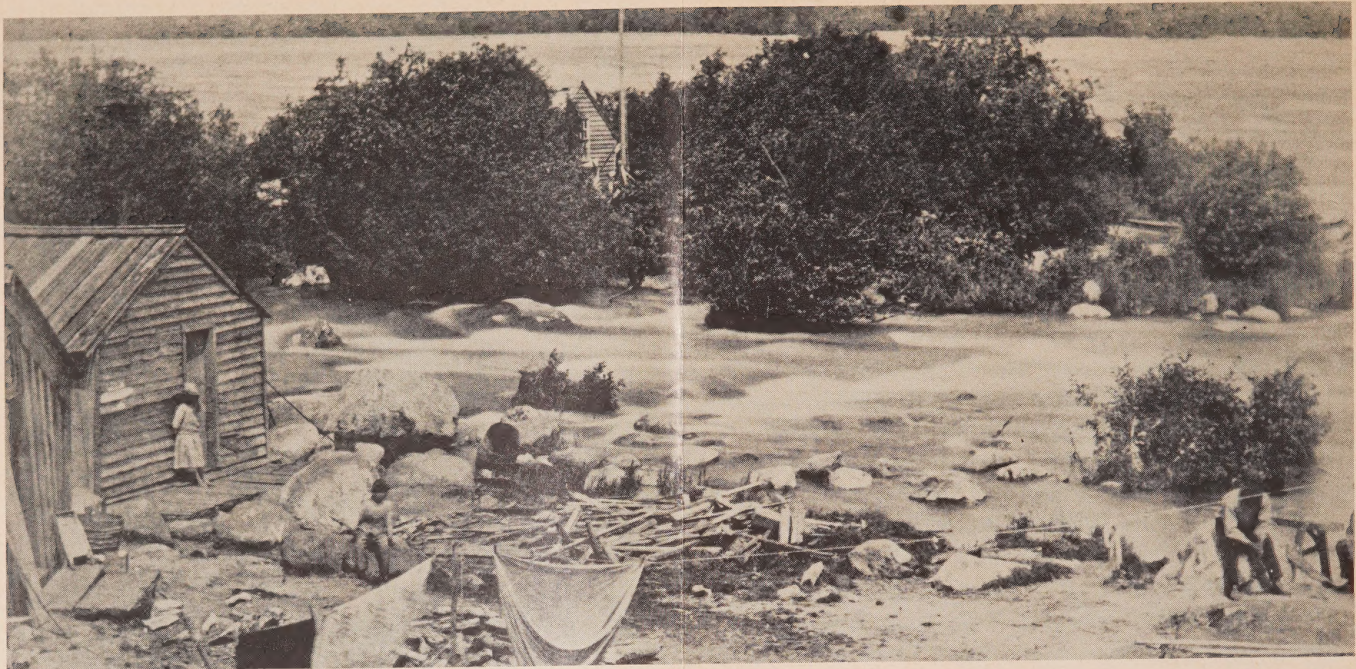
were laid off, one of the most serious labour riots in Canadian history followed. On September 28, 1903, droves of angry, armed workers marched on the company's offices. The Ontario government intervened sending a military contingent from Toronto to quell the uprising. Lake Superior Consolidated was temporarily rescued but Clergue was soon ousted from his position of power.

Clergue's Legacy

Clergue left the Sault in 1911. His contribution to the city's industrial development was remarkable. He had built a solid foundation for the steady growth of industry through the twentieth century. The pulp, paper and steel industries, as well as the power installations, which still draw on the region's rich natural resources, evolved from Clergue's empire. Today, many of the monumental stone mills remain beside the canal as testimonials to the past and continuing industrial greatness of Sault Ste. Marie.

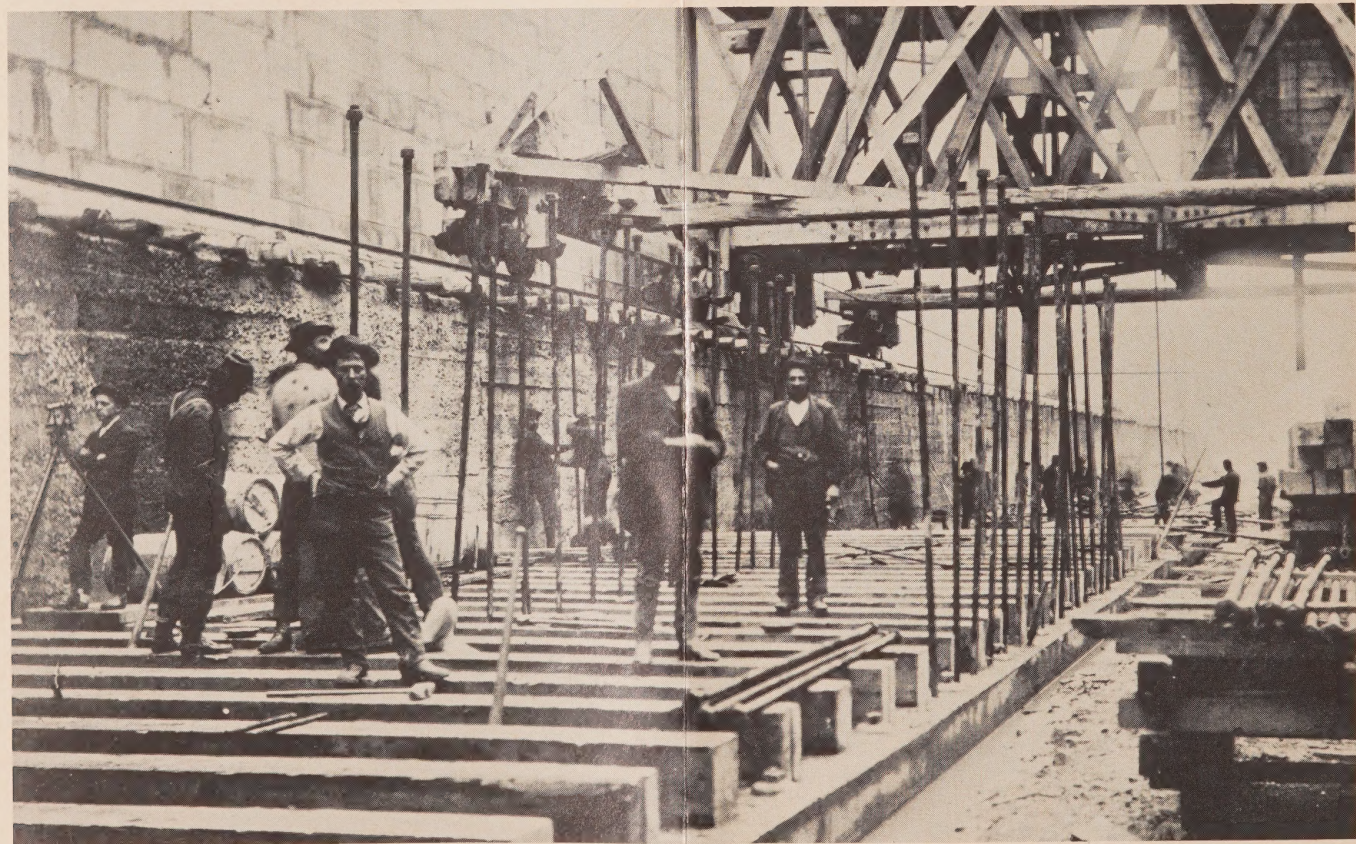
Lake Superior Consolidated Works c. 1900 ▾





PAC C3884

The Rapids, 1877



PAC C3467

Construction of canal, 1893



Ore dock, Algoma Steel, 1918



Foundry of Algoma Steel, 1918

WALK I

(approximate time: 25 minutes)

1. Begin at the **parking lot** of the canal.
2. **Locks' administration building** — houses an exhibit on the history of the canal, a post office and Parks Canada Offices.
3. **Observation platform** — from here view panorama of Whitefish Island (historic Indian grounds), Edison Electric Power Plant (one-quarter-mile-long building constructed by Clergue in Sault, Michigan), and the canal and locks.
4. Proceed to **locks' powerhouse** via stairs.
5. **Shops building** of the locks.
6. Take bridge across power canal; on left is the site of the **1916 Great Lakes Power Station** (to be demolished in 1982).
7. **1980 Great Lakes Power Plant**.
8. **Sault office building of Abitibi-Price** (original offices of Clergue's "Works").
9. **Canoe lock reconstruction** and plaque.
10. The "**blockhouse**", former residence of Clergue.
11. **Mills of Abitibi-Price** (includes stone mills built by Clergue).

Return by same route to starting point to finish, or continue with **Walk II** along St. Mary's Island.

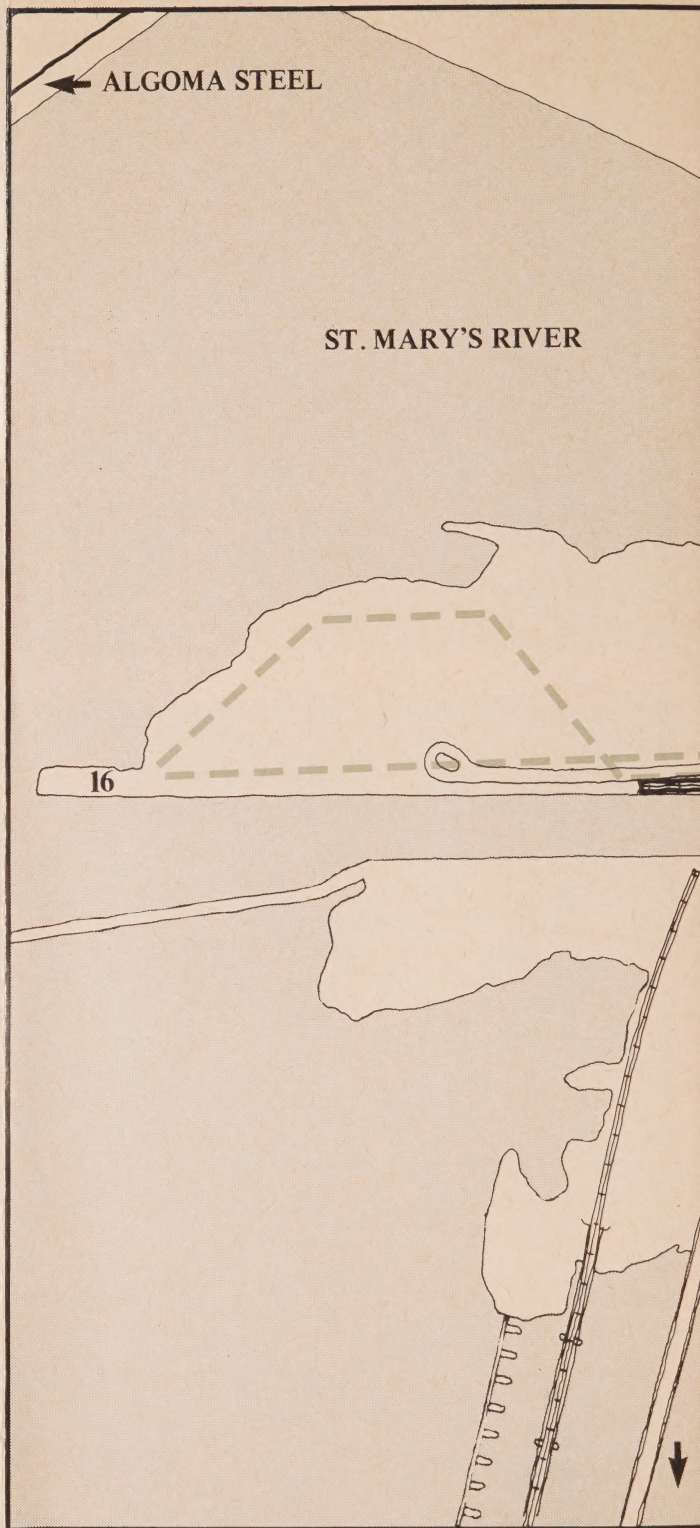
WALK II

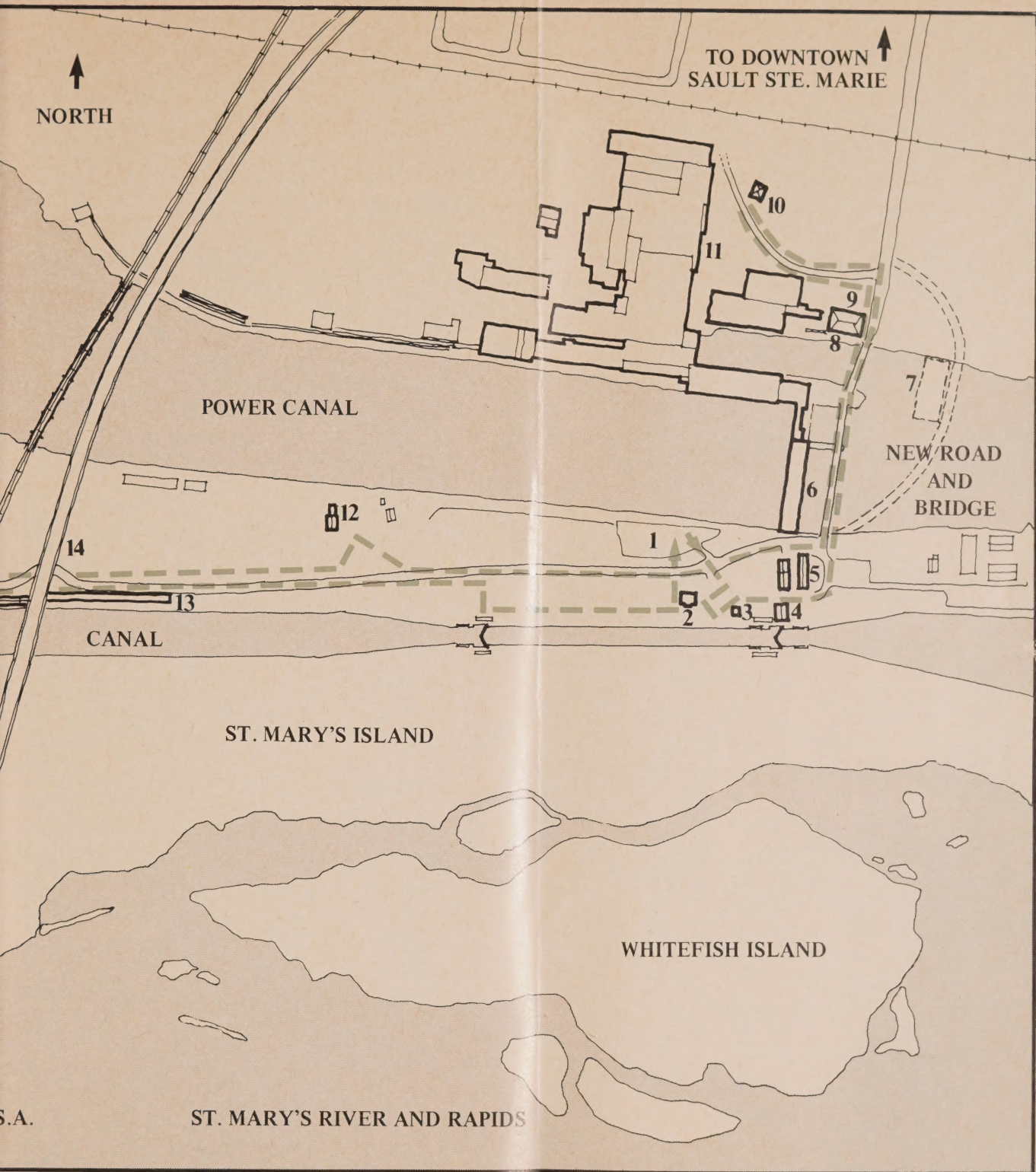
(approximate time: 45 minutes)

Follow **Walk I** from **1** through **5** viewing canal and locks.

Skip **6** through **11** and proceed to:

12. **Lock superintendent's house & garden**.
13. The **Emergency Swing Dam**.
14. Pass under the **1962 International Bridge**.
15. The **CPR Swing Bridge** rotates to cross the canal twice each day, the bridge keeper's control booth is located at the top of the bridge.
16. Walk along pier to view **Lake Superior**.
17. View **Algoma Steel** from this point.
18. Walk beside canal to historic plaques and return to starting point.





Canal

After eight years of planning and construction, the *Sault Canal and Locks* opened officially on October 7, 1895. The mile-and-a-half long canal was cut through the sandstone of St. Mary's Island. The canal walls were faced with limestone imported from Amherstburg, Ontario and Manitoulin Island. The building of the canal involved 600 men at the quarries, 200 stone masons cutting blocks and 400 men excavating and constructing the channel. Only one man lost his life in an unfortunate accident.

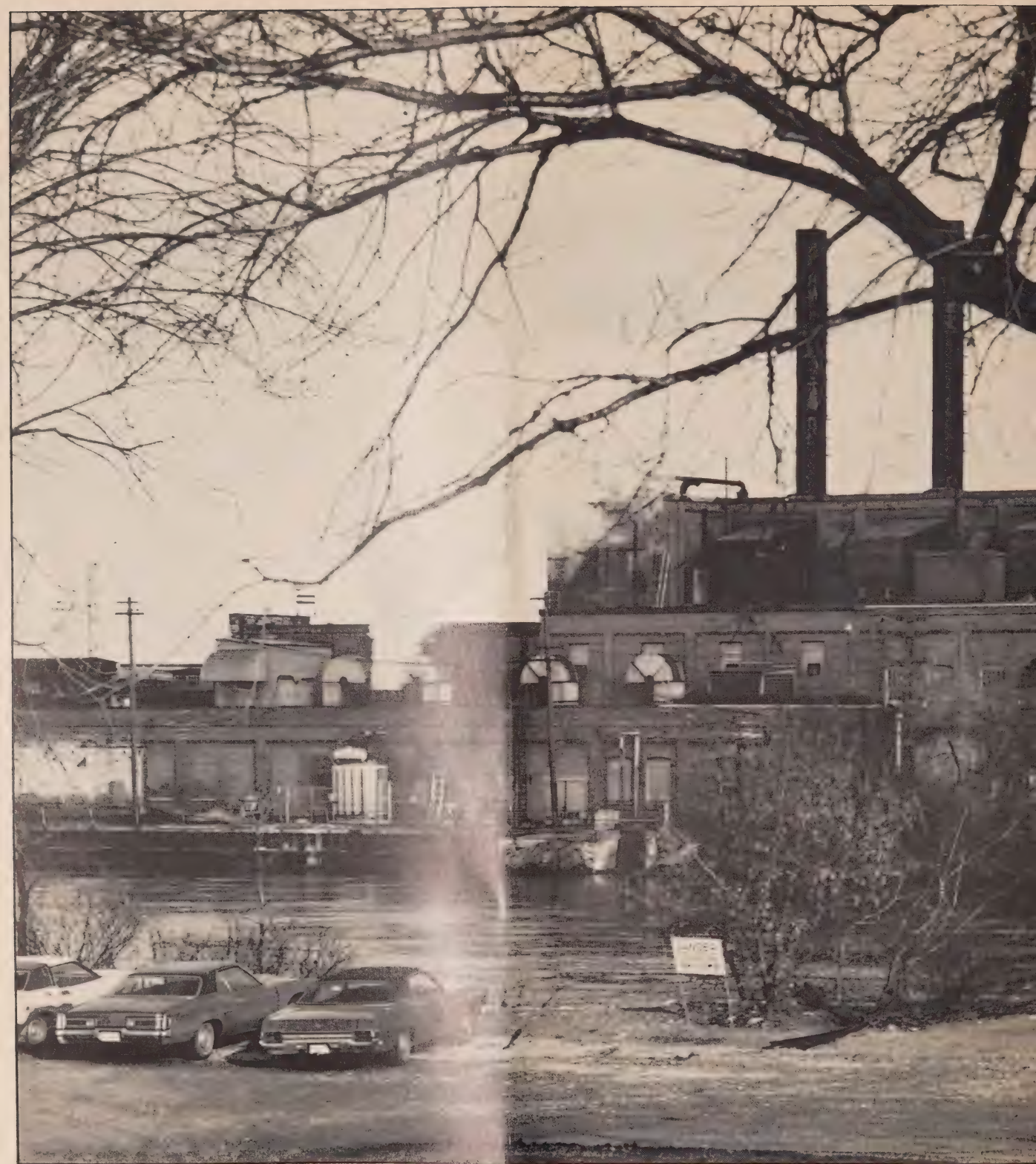
The lock is 900 feet long and sixty feet wide. It can accommodate ships up to 777 feet long and 59 feet wide. Boats and ships are raised or lowered in the lock to overcome a difference in the levels of Lakes Superior and Huron of 20 feet. The lock is now operated by electricity.

The building of the canal and locks inaugurated the industrial boom of the turn of the century by incorporating Sault Ste. Marie firmly into the Great Lakes-St. Lawrence shipping route. The canal is an important link between eastern and western Canada.

Today, four structures remain of the original group of canal buildings dating from 1895. They are the Administration building, (now the offices of Parks Canada), the power house (at the lower lock gates), the shops building (a stone building beside the power house) and the superintendent's residence (about 100 yards west of the locks). All are constructed of the red sandstone excavated during the building of the canal. The limestone trim is composed of rock also used for the canal walls.









Power

The *Great Lakes Power Generating Station* of 1918 was the second built on this site. It replaced the pulp and power mill erected by Clergue in 1896 and which burned down in 1918. This power station is capable of producing 21,000 kilowatts of power from the St. Mary's River compared with 52,000 produced by the modern plant to the east begun in 1980. The old power plant will be demolished by 1982. Great Lakes Power produces and distributes hydro-electric power to large industrial consumers locally and to the Public Utilities Commission.

Power Plant, 1920's ▸



PAC PA 41596



Blockhouse



Situated between the Algoma Central Railway tracks and the Abitibi mills is a curious structure referred to as *The Blockhouse*. Originally a powder magazine, it marks the location of the North West Company fort rebuilt after the War of 1812. In 1894, Clergue discovered it and resurfaced the stone walls. He then built a cabin of cedar logs on that base. It became his first residence in Sault Ste. Marie. He lived and entertained there while the mills were being built. Unfortunately, in 1974 a fire gutted the interior and it remains unrestored.

Canoe Lock



A reconstruction of the first *lock* at the Sault is located beside the Abitibi offices. As part of a lock and canal system built by the North West Company, it passed canoe and batteau traffic as early as 1802. Destroyed in the War of 1812, its foundations were excavated in 1889. In 1895, Clergue preserved and rebuilt the lock on its present site.

The water was nine feet deep in the lock; its canal was a half-mile long. Boats were hauled through the waterway by oxen on a towpath beside the canal.

Pulp & Paper

The mill complex of *Abitibi-Price* includes many of the buildings erected by Clergue from 1896-1901. At that time it was called the "Lake Superior Consolidated Works" and included a pulp and sulphite mill with a capacity of 150 tons of wood pulp a day. After the collapse of Clergue's empire in 1903, the mills were re-opened and began producing paper in 1912. In 1917, the Lake Superior Paper Company as it was called joined with the Spanish River Mills. In 1928, the mills became the property of the Abitibi Pulp and Paper Company.

The Sault mill which is part of the largest paper company in the world produces 450 tons of groundwood specialty papers per day. Behind the mills are the rail yards where timber is brought by freight-cars from forests north of the Sault. Until 1966 logs were floated down the river in booms towed by tugs to the mill.

Expansion and rebuilding have altered the complex since the turn of the century but many of the imposing fortress-like buildings remain. Built of native red sandstone, in a Romanesque Revival style, they comprise a harmonious group unique in all of Canada. The main focus of the complex is the office building with its magnificent arched entrance.





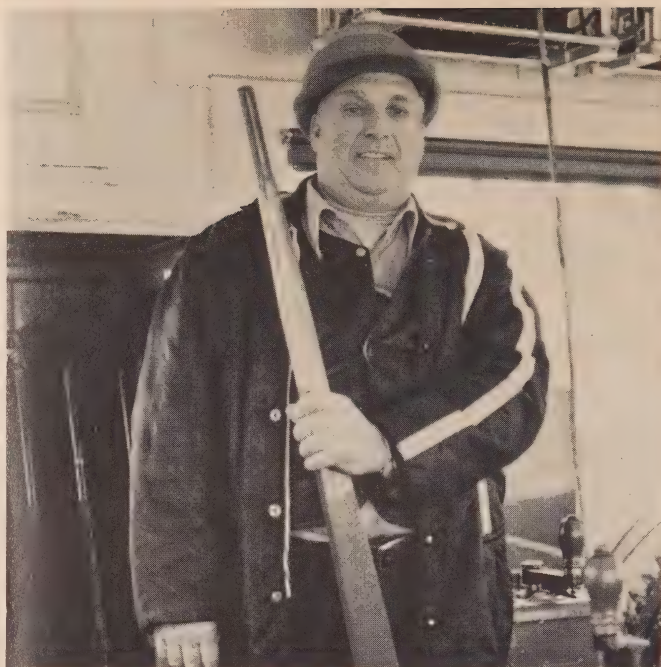
Engineering

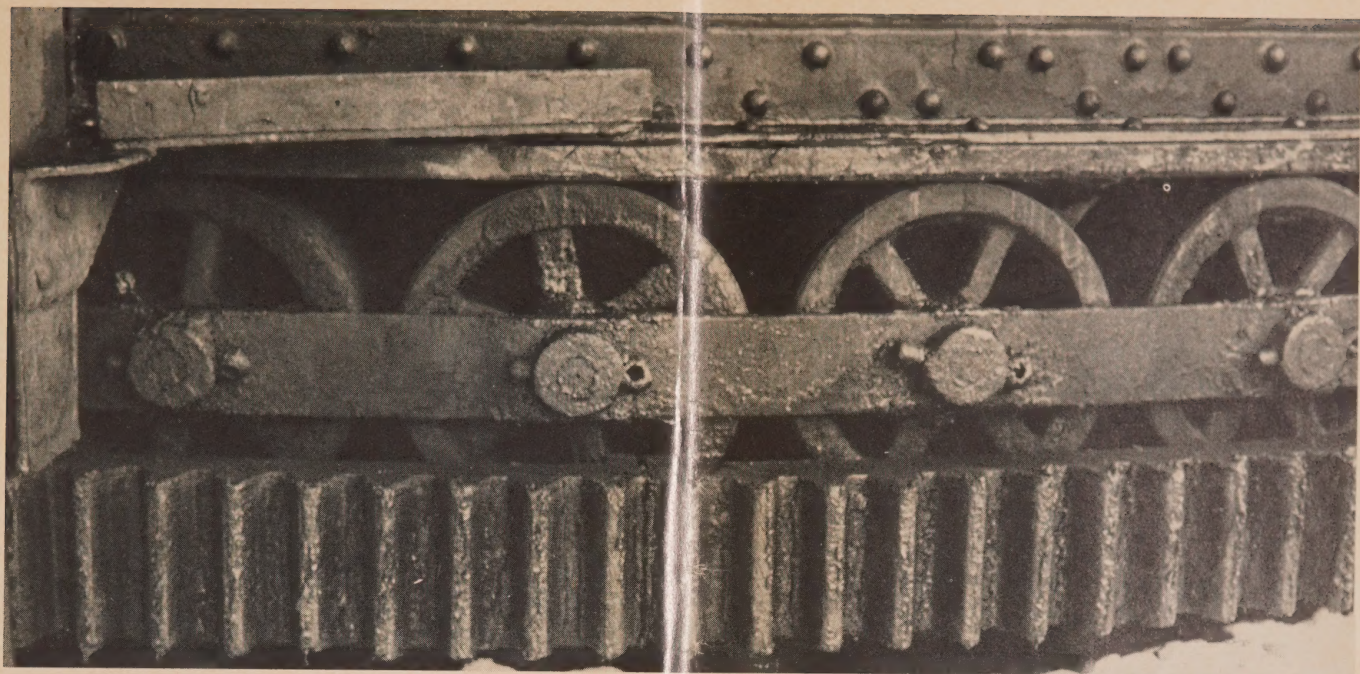
The *Swing Dam* just west of the upper lock gates was installed for emergency purposes upon the completion of the canal and locks in 1895. In 1909, it was swung into place across the canal to facilitate repairs to the lower lock gates after they were completely torn away by a steamer. The dam is of steel truss construction, that is, structural supports are placed vertically or on an angle between bottom and top horizontal beams to form a stable open structure.

The *International Bridge* is an engineering masterpiece completed in 1962 at a cost of \$20 million. It is one of several bridges connecting the United States and Canada. The two-mile-long steel truss bridge rests on 62 concrete piers. The most visually arresting and technologically significant features of this bridge are the arched spans over the Canadian and American canals, a construction known as the "Gronquist Design" after its inventor. Many steel parts used in the bridge were fabricated at the Algoma Steel plant in the Canadian Sault.

Both American and Canadian workers were employed on their respective sides building from each shore towards the center. When the two sides met, they were precise within three-quarters of an inch. Because steel expands and contracts when the temperature changes, 77 joints were built into the bridge so that it can expand in total up to six-and-a-half feet.

The *CPR Swing Bridge* was built in 1898 to allow trains to cross the canal. It is a steel truss bridge that is counterbalanced on each end and rotates on its central pedestal. Twice each day, the bridge operator, in the little house perched near the top of the bridge, sets the gears in motion. In a few minutes, the bridge swings 90 degrees to line up with the tracks on either side of the canal. This bridge has always been an important link with the United States. Now freight cars cross it, but for a long time, passenger service ran here.



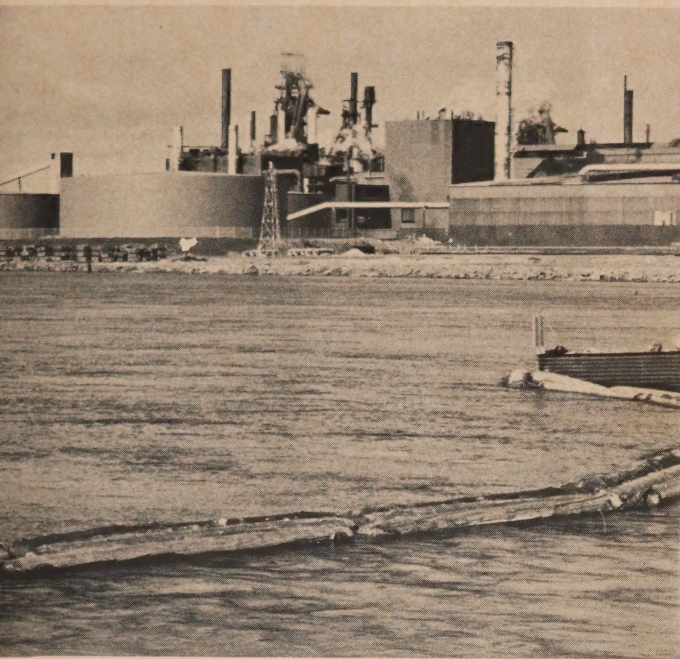


Steel

Algoma Steel Corporation was formed in 1912. But, as early as 1901, a steel mill existed on this site. Founded by Francis Clergue as the Algoma Iron, Nickel and Steel Company, it has grown to become today the second largest producer of steel in Canada. Hamilton's Stelco is the largest. Here in 1902, the first steel in Canada was made and three months later the first rail tracks were manufactured. During World War I, the mill produced 700,000 tons of shell steel. In the 1930's the plant was taken over and expanded by Sir James Dunn. Today, Algoma Steel covers 600 acres. It employs 10,000 people, one eighth of the population of the Sault and any change in production can seriously affect the welfare of the whole city.

Algoma Steel plant, early 1900's. ▷





Steel City

The immigrants who arrived in Sault Ste. Marie at the turn of the century to work in Clergue's steel mill lived in tents on fifty acres of the company's land. By 1903, 300 houses had been built in the marshy area around the mill. This area became known as *Steeltown* and was incorporated as a town in 1904. By 1919, it merged with the city of Sault Ste. Marie. It has, however, retained a separate identity and here, the children and grandchildren of the first immigrants still live and work.



Written, photographed & designed by **Carol Priamo**

Historical photographs provided by the Public Archives of Canada (PAC) and the Archives of Ontario (AO).

This guide was produced by the Ministry of Citizenship and Culture with the assistance of the Ministry of Northern Affairs, in co-operation with Parks Canada.

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